



THOMAS G. NEWMAN,
EDITOR.

Vol. XXIII. May 4, 1887. No. 18.

May shall make the world anew;
Golden sun and silver dew—
Money, minted in the sky,
Shall the earth's new garments buy.

May shall make the orchard bloom;
And the blossoms' fine perfume
Shall set all the honey-bees
Murmuring among the trees.

May shall make the bud appear
Like a jewel, crystal clear,
'Mid the leaves upon the limb
Where the robin lifts his hymn.

May shall make the wild-flowers tell
Where the shining snow-flakes fell;
Just as though each snow-flake's heart,
By some secret, magic art,

Were transmitted to a flower
In the sunlight and the shower.
Is there such another, pray,
Wonder-making month as May?
—St. Nicholas.

Mons. Eugene Francois Jonas, father of the late celebrated Leon Jonas, died at Amiens, France, on March 27, and was buried on the 30th. He was the oldest member of the Apicultural Society of the Department of the Somme, France, and is deeply mourned by his numerous friends and acquaintances in Northern France.

Promptness and Regularity.—Mr. Charles Solveson, of Nashotah, Wis., on April 24, 1887, writes us as follows:

Last week's BEE JOURNAL was lost in the mails. Please send another. It is the first one that failed to arrive at our office in time during the past six years. It is the most "regular" periodical to arrive, of all that I ever subscribed for.

Should a number fail to come on time, we hope our subscribers will notify us at once, and we will with pleasure send another copy. If this is neglected for months, we may not have any left to send another.

Our systematic care in mailing, and promptness in putting them into the post-office here, are the causes of every copy arriving by just the same train on the same day, every week. Our subscribers know just when to expect them, and are but rarely disappointed—once in half a dozen years or so! We do not think that one in a thousand goes astray or is lost! So perfect are the postal facilities in America.

Price Lists are received from J. P. Moore, Morgan, Ky. (Bees); J. B. Hains, Bedford, O. (Bees and Supplies); A. G. Hill, Kendallville, Ind. (Bees and Supplies.)

Not Over-Production! but imperfect distribution, is the cause of low prices and slow sale of honey!! This we have many times stated in these columns, and we do not fear any contradiction of the position we have taken. As corroborative evidence, we would ask the reader to refer to the article of Mr. W. Z. Hutchinson, on pages 280 and 281 of this issue.

In reference to our suggestion to defer the proposed convention on marketing our crops of honey, until early in the fall, Mr. H. says:

I think that Mr. Newman's suggestion, on page 227, is a good one, viz: to defer holding a convention until the meeting of the North American Bee-Keepers' Society, next fall, in Chicago. As Secretary of this Society, I would suggest that at least one day (and the best day at that) be devoted at the next meeting to a discussion of this vital topic.

We fully endorse this suggestion, and refer it to the President, Dr. Miller, who, in the absence of any objection, we think will "declare" that to be the decision of the Executive Board of the society, and provide for the full discussion of the items named by the Secretary, viz: "the cost of production, prices at which honey can be sold at a profit, methods of putting up honey, commission men, cash buyers, home markets, city markets, foreign markets, development of markets, distribution of our products, associations, corners, etc."

Then let us have a full attendance of representative apiarists, and give the matter an exhaustive discussion. There is time enough between this and the meeting, for every one to perfect plans of thought in order to present matured projects for deliberation.

Dispensing with Middle-men.—At a recent meeting in London, Mr. Jones opened a discussion upon the co-operative distribution of the products of the farm.

Mr. Jones, like others who deal with the subject rationally, did not call for the extermination of all present distributors; but he contended, and with reason, that there was a superfluity of middle-men, and that the producer and the consumer stood at the opposite ends of a line of persons who handed the goods from one to the other, each taking a bite on the way. The consequence was an enormous disparity between the price paid by the consumer, and the price the producer got for it.

Apiarists should place themselves in a position where they can use the middle-men to their own advantage—not allowing them to make prices for honey, or compete with one another to break down rates already established, but to handle the product under the supervision of competent apiarists who are cognizant of the amount produced, the state of the market, and the prices it should bring at wholesale and retail. The producers of the world seem to be awaking up to the magnitude of the work before them. "Let there be light!"

"I Want to look at a pair of eye-glasses, sir, of extra magnifying power." Dealer—"Yes, ma'am: something very strong?" "Yes, sir: while visiting in the country last summer I made a very painful blunder, which I never want to repeat." "May I ask what that—er—blunder was?" "Oh, yes; I mistook a bumble-bee for a blackberry."

Falsely Accused.—The poor bees seem to be arraigned almost daily upon some trumped-up charge. While it is annoying to have it so, yet it is in the interest of the pursuit, rather than otherwise. Any attorney will admit that he enjoys the work of proving that a charge made against his client is "false and malicious." So is it in the case of the bees—the more unreasonable the things charged against them, the better does the case appear to all thinking and honorable persons!

In the BEE JOURNAL for April 20, page 243, we recorded the charge made by Dr. B. F. Dunkley, that the bees ate out the hickory pins with which he secured the combs to the frames. Now, on page 279, some malicious person has charged the bees of Mr. Clark, in Arkadelphia, Ark., with eating up *his* young ducks!! as well as eating up the peaches!

This is making the thing ridiculous enough! Were it not for the friendly action of insects to fertilize the flowers of fruit trees, there would be no fruit! Bees are the fruit-growers' best friends; but instead of appreciating their services, some of them are abusing the bees, and trying to prejudice mankind in general against them!

Middle-men are getting into disrepute.

The peach-growers as well as honey-producers are now wrestling with the subject of marketing their products without the aid of commission men. The peach-growers are to meet at Dover, Del., on Thursday, May 12, 1887. The call sets forth the object of the meeting thus:

There is now a prospect of a most abundant crop of peaches, and it behooves us to use timely action to have it properly distributed throughout the country. If sent to a few large cities a glut in those markets must necessarily ensue. We are as competent to place our fruit in the right market as the city commission men, and by a wise and judicious distribution to avoid the disastrous evils of low prices by overstocking a few places. Many other questions conducive to our interests will come before this convention, such as the invitation of dealers to buy directly of us at home, the establishment of a fruit market of our own in New York and other places.

We must have lower freights. We must develop more new markets. We must imitate all the great and successful industries of our country by co-operating with each other for our own good. We must cease shipping at hazard. We must have system.

Men of Honor.—An old mercantile authority says that a man violates the laws of honor when he takes advantage of another's unskillfulness or inexperience, or the technicalities of the law, to impose on him. A man acts dishonorably when he does not make sacrifices to pay his debts promptly; when he sells below the market price to get away his neighbor's customers; and in all cases in which he does acts which if thoroughly understood, would tend to lower him in the estimation of his customers, or any good man.

Tried by this standard, how many dishonorable persons exist, even in apiarian circles, and yet, is it not a fair statement of the case? Men of honor and sterling integrity are always at a premium in every pursuit! Their opinions and advice are ever of value, and worthy of the generation and country in which they live!

Our Queries

With Replies thereto.

[It is quite useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—ED.]

Honey in Brood-Frames or Sections.

Query 412.—All other conditions being equal, how much more comb honey will one colony or 50 colonies of bees store in brood-frames than in one-pound sections?—Ohio.

Not any.—JAMES HEDDON.

In the way you state it, there is no difference.—C. W. DAYTON.

I do not think they would store any more.—W. Z. HUTCHINSON.

They will not store a pound more if side-opening sections are used.—G. L. TINKER.

If the sections are properly adjusted, the difference in quantity of honey will not be much; though "how much more" is difficult to determine.—J. P. H. BROWN.

It will depend upon the bees; some colonies will work much better in sections than others.—H. D. CUTTING.

There is not enough to make up the difference in price that it would have to be sold at; or to pay for cutting it out and fitting it into sections, as some do.—G. M. DOOLITTLE.

I have no means of knowing for certain, but should guess there would be no great difference.—C. C. MILLER.

With an expert, no more; with a novice, often a third more, or even sometimes a much greater per cent.—A. J. COOK.

This is an impracticable question. Different seasons and localities will so operate that no answer of value can be given. As a rule, double the honey is stored in the frames here. Mr. Heddon does not find much if any difference in his locality.—J. E. POND.

I have never tried the experiment in the way you suggest. If you mean that the bees must build the combs in the brood-frames as well as in the sections, there will be but little difference, and the little difference will be in favor of the sections; because bees store honey with the greatest economy in thick store combs.—G. W. DEMAREE.

In cool seasons the difference is not very great. In hot seasons here, with a short crop, we have known the bees to refuse altogether to work in the sections. Some of our Eastern beekeepers have a different experience, probably owing to the difference of the climate. At any rate no rule can

be laid down. Much depends upon ventilation in hot weather.—DADANT & SON.

If the bees are to build the combs, there may be some difficulty in getting them to work in the sections in cool seasons. If combs or foundation are supplied in each place, and if the season is warm and honey is plenty, there will be no difference.—THE EDITOR.

New or Old Combs for Winter.

Query 413.—Will bees winter better on old than on new combs?

I think not.—G. L. TINKER.

I think they will.—C. C. MILLER.

There is no difference.—C. W. DAYTON.

I have seen no evidence in that direction.—W. Z. HUTCHINSON.

I see no reason why they should.—A. J. COOK.

We have never seen any difference.—DADANT & SON.

I prefer combs that have contained several litters of brood hatched in them.—J. P. H. BROWN.

Probably yes, if any difference; but this is the "gnat" and not the "camel" in the case.—JAMES HEDDON.

It is generally thought they will, but I do not know this to be a fact.—G. M. DOOLITTLE.

On old combs; and for the reason that they are warmer and stronger. The reason is obvious to all.—J. E. POND.

It is laid down that bees will winter better on old combs. For my part I have seen no difference.—H. D. CUTTING.

I have never seen any difference, if they fare alike as to quarters and stores. I used to winter many colonies that not only had new combs, but part of them were built only part of the way down.—G. W. DEMAREE.

We do not see why there should be any difference.—THE EDITOR.

Extracting from the Brood-Chamber.

Query 414.—Is it essential to extract from the brood-chamber in the production of comb honey?—T. P. VA.

No.—J. P. H. BROWN.

No.—G. L. TINKER.

No.—W. Z. HUTCHINSON.

No.—C. C. MILLER.

No.—A. J. COOK.

I seldom do.—H. D. CUTTING.

It is not, in proper management.—C. W. DAYTON.

I never take honey from the brood-chamber unless I have a special purpose for so doing. A brood-chamber full of brood and honey will give as good results as if the entire brood-chamber is full of brood alone, and I

much prefer that condition of things, though many others think differently. To have an apiary in a starving condition at the close of the honey season, is the greatest misfortune that can well be imagined, even though a large honey crop has been harvested.—G. W. DEMAREE.

No, I never do, and any arrangement requiring such extracting to be done, I should consider very faulty.—G. M. DOOLITTLE.

No rule can be established, for much depends upon the season. We would advise to extract only if the bees are crowded for breeding room.—DADANT & SON.

No. Neither is it advisable. It complicates and increases labor, and does the bees and brood no good, to say the least.—JAMES HEDDON.

Much depends. Prevention of excessive swarming is a necessity to a large yield of comb honey, and the particular circumstances of each individual case must govern. No rule can be given that will apply to all cases or conditions; care and judgment must be used in the matter.—J. E. POND.

It is neither essential nor desirable to do so.—THE EDITOR.

Convention Notices.

The next regular meeting of the Cortland Union Bee-Keepers' Association will be held in Union Hall at Cortland, N. Y., on May 10, 1887.
D. F. SHATTUCK, Sec.

The next meeting of the West Lake Shore Central Bee-Keepers' Association will be held on May 26, 1887, in Koeckring Hall, at Kiel, Wis.
FERD ZASTROW, Sec.

The May meeting of the Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association will be held at Rockton, Ills., on Tuesday, May 24, 1887.
D. A. FULLER, Sec.

The Keystone Bee-Keepers' Association will hold its next annual meeting on Tuesday, May 10, 1887, in the Court House at Scranton, Pa. All are welcome: come and bring your knotty questions. Interesting and instructive essays are promised by noted apiarists of the country.
ARTHUR A. CLARK, Sec.

The semi-annual meeting of the Progressive Bee-Keepers' Association will be held in the Town Hall at Bedford, O., on Thursday, May 5, 1887, at 10 a.m. Manufacturers of supplies for bee-keepers are requested to bring with them, or send, samples for exhibition. There will be a "picnic dinner." All interested in apiculture are cordially invited to be present.
MISS DEBA BENNETT, Sec.

Home Market for Honey.

To create Honey Markets in every village, town and city, wide-awake honey producers should get the Leaflets "Why Eat Honey" (only 50 cents per 100), or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully, and the result will be a DEMAND for all of their crops at remunerative prices. "Honey as Food and Medicine" are sold at the following prices:

Single copy, 5 cts.; per doz., 40 cts.; per hundred, \$2.50. Five hundred will be sent postpaid for \$10.00; or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc. (giving the name and address of the beekeeper who scatters them)

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell lots of it.

Correspondence.

This mark \odot indicates that the apiarist is located near the center of the State named; δ north of the center; ϕ south; \odot east; ω west; and this δ northeast; ω northwest; \odot southeast; and ϕ southwest of the center of the State mentioned.

For the American Bee Journal.

Bees and Grapes—Some Observations.

G. M. DOOLITTLE.

For several years I have been interested in the discussion of the bee-and-grape question, and have many times wished I might add a few lines of proof that bees never injure sound grapes; but until the present season I had no grounds to work on, save that I had grape-vines scattered all through my bee-yard, yet bees had never attacked them. This and much which has been written on the subject is only negative proof that bees do not injure sound grapes. Negative proof is not what we want, but proof of a positive nature. During the past season I have had some experience along the line of bees eating grapes, and while it is not as positive proof in favor of the bees as I might wish for, yet it sheds some rays of light upon the subject.

On any warm afternoon during the month of September, a casual observer would have said, "Doolittle, your bees are destroying your grapes;" and at first I almost so believed myself, but after carefully watching I found out wherein the trouble lay. The Concord and Worden suffered the worst among the black varieties; the Agawam and Salem among the red, and the Lady and Belinda of the white. A close examination of all these revealed that the Concord, Worden and Belinda burst open during a damp night or warm, moist spell; for I would find scores of them at such times cracked about and near the stem of a fresh nature, so that I knew that no bees had been at work upon them the day before, while such examination was made early in the morning before the bees were out. This, of course, cleared the bees from doing aught but sucking the juice from the fruit, so that instead of being the cause, they came in as an effect.

But an examination of the Lady, Agawam and Salem, at first appeared to convict the bees; for on examination these tougher skinned varieties showed a triangular piece of skin of about 3-32 of an inch on each side torn right out of the side of hundreds of perfectly sound grapes. Through these holes the bees were putting their tongues and sucking or lapping up the sweet juices, for all of these grapes are very sweet. I carefully watched the grapes in the morning to see if any appeared freshly cut, as if it was done during the night, but none was so found, and at this time there was nothing on the grapes ex-

cept a few squash bugs or stink bugs, while a long time watching of these convinced me they were not the cause of the holes.

I next watched the bees, feeling almost sure that they did really bite open the grapes, but after watching a long time I failed to see one make any attempt at aught save sucking through holes already made. In fact I soon became convinced that they were not the cause, for where several were collected about one of these torn places, so that no more could get at them, others tried to push in, and failing, would run frantically about in search of some other opening, when to cut a hole through would have been but a short job, if such had been the object. Thus they would continue to run around over different grapes till a torn place was found not fully occupied.

So far I had watched in the forenoon, when the bees first came on the grapes, or had been on but an hour or two, thinking that if the torn places were the work of the bees, they would be more apt to commit their depredations at this time of the day. Finally I thought to watch about 2 o'clock, and later, when on almost the first bunch I looked at was a wasp, such as build paper nests about our houses wherever a secluded place affords shelter. Upon looking further I saw many of them, and a few moments watch gave me the privilege of seeing a grape torn open; for what purpose I could not tell, unless for mischief, for I failed to see any wasp act as if sucking the juice of the grape. They seemed to work upon the piece of torn skin for awhile, and then leave that grape and tear open another. If a bee came near, the wasp would put out a foot or bring out a wing and drive it away, so that no bee could get at a freshly-made hole until the wasp had left.

These wasps I have often seen about the entrances of the hives on warm October afternoons, where they will sit and keep the bees away from them, unless perchance several bees attack them, when they will quietly withdraw a little way and parry with a single bee, not stirring an inch for it. I never knew that they did any harm before, save to annoy the housekeeper when they had their nests behind the window blinds, or in some such place, when they would sting if disturbed. But now I know they are a most prolific source of loss to our ripening grape crop, and to the defacement of our bees. These wasps and the cracking of the grapes has resulted in the loss of at least one-half of my grape crop. However, I am glad to know that the bees have no part in causing the trouble.

There is an item wherein the bees give offense, and that is in gathering the crop. If done when they are on the grapes, care must be used or the gatherer will get stung; for at this season of the year the bees are very sluggish, and will sting on the least provocation by way of squeezing. Again, they will crawl down into the baskets or boxes so that many will be carried to the store-room to be an

annoyance there. Of course a bee-keeper will overlook all of this for the sake of the bees, but such care and annoyance is anything but pleasant to a person who is not a bee-keeper, or especially to a timid person.

Borodino, \odot N. Y.

For the American Bee Journal.

Working for Extracted Honey.

M. A. GILL.

While reading Mr. J. J. Waller's article on page 216, I find his management so different from my own that I concluded to give a brief of how I manage extracting. His first objection is to robber bees, while taking combs away. I am never bothered in this way, and in out-apiaries where I have moved for basswood, I frequently extract in the open air, and on two occasions I have seen the bail break and spill a pail of honey in the apiary, and it was not visited by a single bee. Of course this was in the height of the basswood yield.

Mr. W. mentions "stooping" as an objection. Well, it is, but he would need about two men to help him "straighten"—if he carried some of my colonies into his honey-house. Remember I allow no increase when working for extracted honey, and have my hives tiered from three to four stories high; and I have had them on the scales when they would weigh from 180 pounds to 225 pounds. You will see the straightening up with them would be harder than stooping. I can imagine what kind of a muss I would have, should I take one of those colonies into the honey-house. Think of from 16 to 20 pounds of bees turned loose thus; of course a large percent. would be young bees, that could not get home in any way except on "foot with a guide." These young bees do not know enough to fly to the window, and could not if they did. The little, soft things only know enough to feed a young larva, or crawl into a person's ear.

Another reason why I could not afford to do as he says, is, the bees would lose too much time. Our main crop is gathered in from 9 to 14 days, and when the bees are bringing in from 5 to 30 pounds per day, they should be kept at work, and by using little or no smoke, their work goes on with but very little interruption. By tiering up and keeping one or two frames with "starters only," in the lower story, bees can be kept from swarming. About two weeks before basswood blossoms, I examine my bees, and take the queens away, forming a good nucleus colony. By doing this three important points are gained—one which concerns the nucleus, and two concerns the main colony.

It will be seen that in two weeks after (at the beginning of basswood), the nucleus will have a working-force of its own, and will work wonders in the next two weeks. Next, if the work of cutting out queen-cells has been thoroughly done, swarming is

up for the old colony; and last, but not least, they have no brood that is of any value to them; that is, their brood is all sealed up, and who has not noticed what a colony of nearly all old bees, with no brood, plenty of empty combs, and a large entrance, can do in the way of storing honey?

To return to the matter of extracting: Where hives are 3 stories high, there will be two sets of combs to take off. By having a box with a cover, handles and legs, two men will take them to the honey-house and extract them with as little stooping as if the hive was taken. I imagine that what would do in my location would not be advisable in Mr. Waller's. I suppose his yield is slow, and lasts for months, while ours comes in floods, usually about 10 days of white clover, and about the same of basswood, with less honey but a longer flow from buckwheat and goldenrod.

Where bees have been in 3 and 4 stories through the basswood flow, they should all be removed but one super, as soon as the yield is over, and, in fact, worked into the brood-chamber as early in the fall as possible. The big colony is gone; the three weeks used in rearing a queen, and the three weeks before her brood hatches, together with the fearful mortality incident upon a large honey-flow, makes the difference.

Star, Co Wis.

For the American Bee Journal.

Do Bees Really Hear?

ELIAS FOX.

In regard to Mr. Brimmer's article on page 240, I would say that I am as much of a lover of the truth as any one. I do not wish to be understood as saying that bees *cannot* hear, but I do not *think* they can; and so far I do not think that Mr. B. has furnished any proof to the affirmative. I did not say that bees are wholly guided by the sense of sight, but by sight and scent both. Now I do claim that the sound is produced *wholly* by the wings, whether they are in a person's hair or under his coat collar. A bee in the act of stinging moves its wings with lightning rapidity, which we all know they cannot do without emitting a buzzing sound, and at the same time we can smell the formic acid which attracts other bees. We cannot hold a bee in our fingers tight enough to prevent its wings from moving, unless the bee is crushed.

I do not claim that a colony going to the woods can see the tree from the time they leave the hive, but I think they start out and go into the first suitable tree they find. If they do not, why is it that they are frequently found clustered on trees and bushes, after going miles in search of a suitable tree, some even traveling until with dwindling and storms they are worn out and never find a place to get into? Several years ago I found a colony clustered in the top of a tree at 7 o'clock in the morning, and they remained there until 3 p.m., when I

cut the tree down, hived them, and took them home. I know a man who, two years ago, found a colony clustered on the underside of a limb of a small basswood tree, and had comb enough to fill an American hive. So it looks plain enough to me that they do not know where they are going to locate; and I do not think they carry flags of truce either. I do not believe that Mr. B. has reared a sheep, or he would not say that a flock is attracted by the bleating of the leader.

I would advise Mr. B. to try running ahead of an absconding colony without his milk-bell, and see if he does not succeed just as well. I have noticed young and old queens piping on the comb, and I am just as positive that it is their wings which causes the sound; for if you are a close observer, you can see their wings move in accordance with the sound. Let a bee alight on the hand, and set up a buzzing, such as they do at the entrance of the hive, and if you cannot feel the vibration I will admit outright that bees can hear. They scent a virgin queen as readily as a fertile one. Now let us not have so much guess-work, but if bees can hear, let us have some good, solid proof, as I am open to conversion.

Hillsborough, Co Wis.

For the American Bee Journal.

Storing Surplus Honey, etc.

G. W. DEMAREE.

The enthusiasm of the old class of bee-keepers found vent in swarms; but since we have learned how to breed and multiply our "live stock" at will, the direction of the outlet has turned in the opposite direction. We now want to know how to keep increase in proper bounds. A few years ago we were advised to work our apiaries on the "prime swarm" plan, i. e., just take one good (first) swarm from each colony; but we asked, "where is this thing to end?" We were told to sell our surplus bees, and we asked, "where or to whom, if every bee-keeper must double his stock every year?" I could find no solution to this problem except to let the overplus of colonies consume two or three dollars worth of honey, and starve at last, or be over-run with more "live stock" than was profitable to keep.

This perplexing quandary set me to experimenting to find a plan that would turn the energy of the "prime swarms" into surplus honey, and turn the swarms into mere nuclei and into non-existence, if desirable, at the close of the season. To accomplish this the necessary manipulations may be varied considerably. The gist of the plan is to draw from the parent colony after casting the first swarm so many of their mature workers as will prevent after-swarms, and throw these into the hive containing the swarm; an essential feature of which is to have the swarm on the old stand, so that there will be no returning to the old or parent hive to keep

up the swarming impulse. Another essential feature is, the queen's apartment in the new hive containing the swarm must be so contracted as to be in the condition of a mere nucleus brood-chamber—thus throwing nearly the whole force of workers into the surplus department. In my locality two or three weeks of time immediately after the swarm issues, must give all the results that can be expected from a swarm, and if I can get 100 pounds from a good swarm, I consider that the swarm was turned to a good account.

My plan is to so manage my bees under the swarming energy that their entire force will be spent in storing surplus honey, instead of being permitted to turn their force into increase of bees. I cannot prevent my bees from swarming, and keep the colonies in a normal condition, but I can convert the strength of the swarms into surplus honey, and the swarms themselves into non-existence by "contracting" all the honey into the surplus departments, and removing it to the honey store-room.

While practicing my system of preventing increase, I have had ample opportunity to observe how the "contracting system," first brought to light by Mr. Doolittle, and later systemized by Mr. Hutchinson, will work in my locality. Such treatment would bring my apiary to ruin in an average season, unless I should feed the colonies through the heated months of summer, and supply them with winter stores in the fall, in which case I would lose rather than gain in the operation. Some seasons the bees would survive such management because of favorable conditions, but favorable conditions are not certain here, and therefore the contracting system is unsafe, if our bees are to be kept in good condition without feeding the profits of the apiary back to the bees. Nature seems to have laid tribute on all things. Every pound of honey costs the life, energy and death of a great number of bees. Brood represents honey, and honey represents brood.

My experiments, and my practice to keep down increase, shows that to so manipulate the hive arrangements as to throw all the honey into "surplus," costs the life of the colony. Now if we feed back to counteract the loss on the side of the bees, we have gained nothing—nay, lost in the operation. Ten pounds of sealed honey in the brood department is worth more to the bees than 15 pounds of liquid honey or syrup, unless the experiment is made for stimulative purposes, and then you must account for the loss of life and vitality of the bees caused by the labor and excitement while re-storing it.

How easy it is for a man to work himself up into the conceit that he has discovered "something new under the sun," when his peculiar environment, or perhaps his ignorance of past history, or of the laws of nature, is all that is in it. This is a great country of ours, and there are many places where bees will do as well and apparently better, with mere

starters in the frames, than if supplied with full sheets of foundation or with empty combs. An extra good season now and then has turned my head in that way; but when it comes to running an apiary from year to year as a business, comb foundation and empty combs cannot be dispensed with in the majority of the apiaries of the country, and their judicious use must be profitable everywhere.

Our bee-literature is in a muddled condition, and is likely to get worse since in "book making there is no end." One of the worst and most vicious tendencies in the would-be authors of the times, is to lionize somebody, or some bee-hive, or some theory, instead of writing directly to the matter in fact, as indicated by the title of the book.

Christiansburg, 3 Ky.

For the American Bee Journal.

Bees and Fruit—Removal Desired.

Z. A. CLARK.

The following appeared in our local paper, the *Standard*, concerning my apiary:

"As some dissatisfaction has arisen in this place tending to and developing into a somewhat organized effort to have the apiary of Z. A. Clark declared a nuisance by the city authorities, and forcibly ousted from the city limits, we deem it pertinent to discuss the matter. A veritable howl has been raised against Mr. Clark's bees, and it is said on account of the fact that the little workers were attacking and actually destroying the growing fruit of the town. The idea was really a new one to us; and besides believing that the man engaged in apiculture on his own premises had rights to be respected and protected as much so as the followers of other avocations, we believed they were mistaken as to the ability of the bee to do the damage it had been charged; so investigation showed that the opinions of the citizens as based on their experience and observation in such matters, were widely divergent. But the matter we feel is fully settled by the official report to the United States Entomologist, by N. W. McLain. From it will be seen that it is impossible for bees to puncture the skin of sound, unbroken fruit. Let the enemies of the industrious bee read it."

Then follows the report as already published in the BEE JOURNAL.

No one in this immediate vicinity is cultivating fruit as a business, and from May 10 to June 3 it was extremely dry, and no rain—something very unusual in this locality—and in consequence, the bloom was all destroyed. From June 3 until July 1, it rained incessantly, and the early peaches began to ripen when a rain would come. Hot sunshine upon the fruit would cause it to break, rot and collapse, and there being no honey, nor bloom for the bees to work upon or gather honey from, and in con-

sequence of the drouth preceding, and followed by rain every day for a month, the bees were starving, and so they took to the juice exuding from the decaying peaches. From ignorance, the populace—the "cranky" part of them—set up a veritable howl that Clark's bees were eating up all the peaches! One party even went so far as to say they ate up his young ducks. As for this I cannot vouch, as they were not brought into the apiary.

This is the only move ever heard of this kind in any town or city in Arkansas. Our town has about 1,800 inhabitants, not crowded, and bees have been kept here for 50 years.

The chronics are a minority, and last year, as soon as the flora grew, the bees left the fruit, and there was no more complaint. They want to have the bees moved this year before fruit ripens. I do not know what steps to take. I have no other land in this county but what my bees are on, and I have no money to buy any, and want to make a living, if I am allowed to, from my bees.

Arkadelphia, 9 Ark.

[The Manager of the Bee-Keepers' Union, by request, has advised Mr. Clark as to what course to pursue. The false accusations against the bees, about their breaking the skin of grapes, when thus refuted, will be advantageous to the apiarist. All he needs is to treat the subject with calmness, be courteous to his adversaries, and await the reaction which will surely come in due time.—Ed.]

For the American Bee Journal.

The Prevention of Swarming.

OTIS N. BALDWIN.

This topic seems to be agitating the minds of the wide-awake apiarists of to-day, and well it might; considering the close competition and prevailing low prices of honey it behooves us to make every "corner cut" in producing the most honey with the least labor and capital expended. It is unnecessary to state that the quality must be gilt-edge to compete now-a-days, for every live apiarist has discovered that ere this. But to the point:

It is a fact beyond dispute that if the bees of a colony can be kept together with all its increase, and made to work in the sections from the commencement of the harvest, and produce an impulse for gathering honey equal to a swarm just hived, without destroying any of the fundamental rules necessary to produce harmony in the hive, more honey can be obtained by such a non-swarming plan than is possible to obtain by letting the bees increase naturally. But some will say that such a thing is impossible; that the greatest entomologist, and the most learned apiarists in the world have not discovered it, and therefore it is impossible; and should

a common bee-keeper proclaim that he could accomplish it, he would be at once put down as a fraud, trying to swindle the fraternity out of a few dollars.

In this day of frauds and humbugs, we cannot be too careful. While this is all true, we should not cry down a thing that might be worthy an investigation, without knowing something of the footing upon which we stand. I have read Mr. Gresh's article on page 167, and I am inclined to think that he will still look in vain for the desired method. He states, too, that he is glad that Mr. Simmins has given his non-swarming method to the public, etc. If I am rightly informed, Mr. Simmins did not give his method to anybody; he published a pamphlet on the subject, and it is for sale. Let some man ask Mr. Gresh to give him a hundred pounds of honey; would not Mr. Gresh be a little non-plussed? Would he not say, "my honey is my labor, and must bring the cash." Then he would cast a smile at the stranger, as much as to say, "you are awful green!" It is just the same with a non-swarming plan that is genuine; it costs money, and takes labor to experiment, and the man that discovers such a plan as is mentioned above, will not give his time, labor and money for unappreciated glory.

Many bee-keepers, too, want increase in their apiaries, and think that a non-swarming plan prevents increase. This is just exactly as the bee-keeper wants it. He can have all the increase he wants, or none, and can always have his bees in good condition, which is impossible where swarming and contraction is practiced. I have tried the contraction method to my sorrow, and consider it the most impractical plan in apiculture. It is unnatural, and ruinous to an apiary for at least a year thereafter. Any plan of manipulation that is calculated to violate the God-given laws of nature in handling bees, will prove a failure every time. Let the bees follow their own instincts, arrange the hives accordingly, and you have the non-swarming plan described above; and I will insure your bees not to cast 4 swarms in 100 colonies, in a normal condition, and get every pound of honey in the surplus departments, if you want it so. It does away with two-thirds of the labor, and makes happy bee-keepers.

A hundred years ago railroads, telegraphing, telephones, and thousands of other wonderful inventions were unknown, and if any man could then have looked into the future and revealed the wonderful things that have transpired, he would have been looked upon as in conspiracy with the evil one. In all the literature on bee-culture of the present day, there is not a single process recorded where artificial fertilization of queen-bees has been made a success, and most of the authors claim it is an impossibility to produce fertile queens in confinement.

I have queens that were hatched in cages, and their wings were clipped before they ever had the possibility of a chance for a flight. They were

operated according to a plan of nature's own laws; they are as prolific layers as any other queens in my apiary of 75 colonies, and they did not go through the absurd, scientific monstrosity mentioned on page 65 of "A B C of Bee-Culture." It is my opinion that all bee-keepers who claim to have ever observed such wonderful nonsense, were laboring under a delusion, or looking through the wrong end of the microscope.

Practical bee-keepers are testing the methods, reports of which will appear in due time. Any plan of operation that is a success will work in one apiary as well as another, if the normal conditions are properly observed. A man that has passed his opinion beforehand is unfit for a jurymen; the same rule holds good in apiculture. It is the investigator that takes the lead, and reaches the *ultimatum* of success.

New England Homestead.

Securing Apple-Blossom Honey.

SAMUEL CUSHMAN.

Under the usual management, surplus honey is rarely taken from this source. Bee-books generally teach that apple honey is dark, inferior in flavor, and is of use only in building up colonies. A prominent New York bee-keeper once said: "We could get as much honey from apple-blossom as from basswood, if we had the workers at that time to gather it. But with plenty of bees, a failure of the yield, or cold and rainy weather, will prevent success, as many have found."

In southern New England, honey from this source is often obtained in large quantities in the brood-chamber without special management. A Massachusetts apiarist had one colony gather "72 pounds of surplus honey in four days from apple-bloom."

Last season I acted on the above suggestion, and by special management obtained a nice lot of apple honey in pound sections. It was the thickest and finest flavored honey I ever tasted, and when gathered and capped quickly, it was nearly equal in appearance to the best white clover honey. It was not quite so white, but was bright and clear, and the apple-blossom flavor was very distinct. This honey was exhibited at the Rhode Island State Fair, received the first prize, and was sold to a dealer at a better price than is given for white clover. The judges and bee-keepers generally who tasted it, pronounced it equal or superior to anything they had ever eaten.

My management to obtain this honey in sections was as follows: Early in the spring I fed warm syrup, artificial pollen and uncapped stores, and added empty combs, etc., to get a force of workers in time for the bloom, which I expected about May 20, but which opened on May 10, as the season was early. Just before the height of the bloom, I filled out the brood-chambers of several colonies with capped brood from weaker ones,

leaving only combs of capped brood, and also united a few colonies where two stood side by side. One was removed; the other placed between where each stood. Nearly all the bees from the removed colony were brushed in front of the remaining one. The one removed had the queen, combs of honey and uncapped brood, and enough bees to cover the brood, and were in a condition to build up. They were placed on a new stand. The prepared colonies had combs full of capped brood, an extra lot of young and field bees, and were obliged to occupy supers for want of room, and had no other place to store honey. The surplus cases contained rows of sections of empty comb, alternating with those having full sheets of foundation.

The result was from 20 to 30 nicely capped sections per hive. This was nearly all gathered in three days. One colony furnished 32 sections of honey and did not swarm. Without this apple honey I should have had little choice comb honey last season, as clover was a failure, and there was little fall honey. Under this management, honey is produced at a greater cost of bee-power than that from clover or a later crop, and therefore must bring more to be profitable. This is but the experience of one season in taking honey from this source; it may vary in quality in different seasons. Those who try this plan and succeed will, I think, be well repaid by the quality of the product, but I would suggest that it may be safer to work but 1 or 2 colonies in this way.

Pawtucket, 3 R. I.

For the American Bee Journal.

The Honey-Producers' Association.

W. Z. HUTCHINSON.

Not many years ago bee-keeping was a bonanza, in one respect, at least; and that was in the selling of its products. The pursuit is a fascinating one; its beauties have been painted in the brightest colors; its ranks have been filled to repletion; and the active minds of its bright devotees have all been brought to bear upon one focus—*production*.

The bonanza is a bonanza no more; the beautiful, pastoral pursuit has been forced down to a business level—yea, below the business level of some occupations. In overcoming the difficulties of production it seems as though success had ended in over-production. The wiggings, twistings, and frantic attempts of the "boomers" to attribute the low price of honey to something, *anything*, than over-production, are really pitiful in their ludicrous inconsistency. It must be admitted that the demand has not kept pace with the production. Once the honey-buyers sought the honey, now the honey must seek them; and it is a tedious task to find them, as the commission man has sprung up and the cash buyer faded away. The commission merchant has been ter-

ribly abused of late; and, mingled with the abuse, it is quite likely there were some unpleasant truths. Personally, however, I have nothing but praise for this class of men.

Bee-keepers are not the only class, however, that has suffered from over-production. Many strawberries were sold last season for scarcely enough to pay for picking, transportation and commission. Last September I attended a meeting of the American Horticultural Society, held at Cleveland, Ohio. The president of the society, Parker Earle, the "strawberry king" of Illinois, in his annual address, went straight to the heart of this problem. He said:

"Many as are the enemies to conquer in every line of horticultural effort—and sometimes it seems as if all the forces of nature were combining against our success, when insects deface, and blights wither, and drouths burn, and frosts destroy—yet the ingenuity, the energy, the enthusiasm of the horticultural producer are found sufficient in most cases to overcome all obstacles so far as to provide enough, and too much. In fact, the difficulties of production have been so far overcome that most branches of the business *seem* to be suffering from over-production."

"Looking at this question from the stand-point of a commercial grower of fruits, it appears to me that one of the chief problems for our fraternity to solve is, how to distribute our products more perfectly—how to reach wider markets.... There is as yet no over-production of good fruits; but there is defective distribution. There were not too many apples grown in New York, Michigan and Missouri last year, although apples sold in many of our large markets for prices far below the possibilities of profit; but our system of distribution left half of the families in America with few or no apples to eat last winter. When one or more barrels of apples go into each farm-house and laborer's cottage all over the South; to each miner's cabin among the mountains, and to all the new homes building on the wide plains of the West, the supply of apples will not be found too large. There have not been too many oranges grown in Florida and California for the last few years, though many orange-growers have gotten little profits from their crops; for three-quarters of the people within a practicable commercial distance of these orange-orchards have eaten scarcely any oranges in these years. If all the American people were to eat apples and oranges daily in their season, the quantity produced would not supply their wants. A more thorough system of distribution will render this approximately possible...."

"Hence it appears to me that we are not producing too much, but are marketing too poorly, and that the question of distribution is the one most important to the commercial grower. Its successful solution will result in infinite benefits to the people who consume, and in living profits to the often-discouraged class who produce."

I think that Mr. Earle has most clearly covered the ground upon which lie the troubles of the honey-producer; but exactly how to wipe away these troubles—to place a barrel of apples (or a crate of honey) in "each miner's cabin among the mountains"—he left unsaid, except that we are to market better and distribute more widely. Excellent advice, but *how*? It is to wrestle with this question that would be the legitimate work of a honey-producers' association.

I very much doubt if any association of honey-producers will ever be successful in getting up a "corner" on honey. Very many producers would not join the association, and while the members were "cornering" the honey, holding it and fixing prices, the outsiders would be selling their honey. There are too many bee-keepers; too many varying circumstances; it will be impossible to combine them and secure uniformity of action. While I have no faith in the "cornering" scheme, I do not belong to the class that says that nothing can be done.

The production part of the bee-keeping industry has been studied now for years. With rare exceptions it has been the only theme in bee-papers and at bee-conventions. It is almost impossible to say anything new upon this branch of the business; in fact, until lately it was scarcely necessary to touch upon any other department. The time has now come, however, when to produce a good crop of honey is one thing, to sell it to advantage is entirely another. To cheapen production may possibly help us, but the other end of the problem—that of securing good prices for honey—will bear the most working. The problem can be solved much more quickly by beginning at this end. A few have tried working at this "end." Mr. Muth has called the attention of bakers, packers of pork and pickles, and tobacco manufacturers, to the using of honey in their business; Mr. Bingham has told us how to make the best of vinegar from honey; Arthur Todd uses honey in making candies; Mr. Newman and others have furnished us thousands of leaflets for distribution; J. H. Martin has just brought out a new and peculiar small package for extracted honey; our Canadian brothers went over to England last summer and showed our cousins across the "big pond" the superiority of American honey; tasteful exhibits of honey have been shown at Fairs, etc., but more, *much* more must be done in this line, or else a radical change made in the methods of marketing, ere the palmy days of old will return even in a measure.

I think we owe Mr. Baldrige a vote of thanks for having started a discussion upon this subject. Much good has been done; and while I think that a meeting devoted to a discussion of this subject would work to the advantage of bee-keepers, I doubt the wisdom of calling such a meeting this spring. Reform movements and changes come about slowly. Many bee-keepers seem to have rather vague ideas in regard to what will be or can

be done at such a meeting; they will wait and see what is done. We can get no reduced rates, and this, combined with the apparent lack of enthusiasm, would, I believe, result in a very slim attendance. Very few bee-keepers would spend any great sum of money just now to attend a meeting that is to discuss only this one topic, broad and all-important though it be. I think that Mr. Newman's suggestion, on page 227, is a good one, viz: to defer holding a convention until the meeting of the North American Bee-Keepers' Society, next fall, in Chicago. As Secretary of this society I would suggest that at least one day, and the best day at that, be devoted at the next meeting to a discussion of this vital topic.

This meeting will probably be a "rouser;" composed of representative men; and the cost of production, prices at which honey can be sold at a profit, methods of putting up honey, commission men, cash buyers, home markets, city markets, foreign markets, development of markets, distribution of our products, associations, "corners," etc., can all receive such a discussion as they never before have received.

In my opinion this is a live question—it is the problem that now confronts bee-keepers; let us study it well the coming season, then meet in Chicago next fall and see if associations will help us to solve it.

Rogersville, 6 Mich.

For the American Bee Journal.

Our Honey Crop for 1886.

C. W. DAYTON.

The honey crop of Chickasaw county, Iowa, for 1886, was close to 100,000 pounds. A good many thousand pounds was shipped to distant markets, and mostly remains unsold; nearly as much was brought from other States and sold here.

The general complaint, or "howl," rather, is that there was not half enough honey produced to supply the home demand. The honey-producers of the county are located usually 2 or 3 in a place near some town. The inhabitants in and near those apiarists obtained enough for their bread and cakes during the fall, but when winter came the honey was "played out." From 6 to 8 months in the year the consumers of honey in this county are forced to abstain from its use. If all the families in the county could use, and knew where to get what honey they would be glad to pay cash for, it would be equal to 1,300,000 pounds, and we cannot boast of a very populous or wealthy county either. There is a great demand for it at present; but the demand will be supplied when we get another crop.

Some bee-keepers have a greater demand for honey than others. It may be that it is because those bee-keepers usually leave it on the hives the longest—so long that their customers get very hungry for it. Then they let them have it all at one dose.

I do not think the bee-keepers around here are very sharp. When they are nearly sold out, so there is not much on hand, they always cling to the same price. Where honey is scarce they ought to do as other folks do: ask a big price. Honey always gets lower and lower, but the price does not fluctuate around here. If the price would change, then a customer would not be so likely to question the price and buy somewhere else. As it is, once posted, he is fitted for life.

I always find good sale for comb honey in sections where there is some bee-bread in them. That is when I am selling to private houses, but it does not work very well with the merchants, as they expect to get it for 2 or 3 cents per pound less on that account. Sometimes, where people are used to adulterated or poor honey, it would be hard work to sell if it was not in boxes or frames that showed the roughest work of the bees. It is not always the appearance of honey that makes it sell, any more than the dealers are the best customers. I once sold 14 two-pound sections of excellent comb honey to a man who dumped them hither-skilter into a grain sack which was thrown across his horse's back, and carried 8 miles home.

I do not sell honey to those who do not want it, but sell to those who do want it. A good place is to keep some honey in the combs till spring, then extract it and give the neighbors a taste. Do not try to sell them any. They will buy it of you sooner than you could possibly sell it to them. The greatest fault in bee-keeping in this county is that we cannot get enough honey to meet the demand. We cannot get enough to feed one-tenth of those who would like it.

Bradford, 6 Iowa.

From Gleanings.

Disposing of our Honey Crop.

MRS. L. HARRISON.

There is no subject that comes nearer to us all than the best way and means of disposing of our honey. If a bee-keeper ships his honey to a large city, and sits down to smoke, he will, in many instances, have time for a pretty long smoke before he has any returns for his season's labor.

There are few localities where there are not more than 100 colonies kept, which would not be able to consume all the product. I once stopped at a farm-house, five miles from any town, where 40 colonies were worked for extracted honey. The proprietor said: "I never take away a pound of honey; the neighbors come with their jars and pails, and take it away, and I could sell much more if I had it. I cannot half supply the demand."

Farmers formerly, in Illinois, consumed large quantities of molasses. They bought it by the barrel or in kegs. Emigrants from Pennsylvania missed their fruit-butters, for which they are so famous, and the large family of "spreads" scoured through

the woods in search of wild plums, grapes and berries, and finally succumbed to the inevitable, and ate molasses. Since the advent of glucose-factories, molasses and syrups have "gone by the board." Fruit is more abundant than in the early settlement of the country, but it does not entirely fill the gap. This class of consumers are almost entirely neglected by producers. They think honey is something to be sold to town-folks. How one of our Western farmers would laugh if you should ask him to buy a pound of honey! "A pound of honey? Why, that wouldn't be a lap. Bring me 50 or 100 pounds." He has no use for a 10-cent package.

Those who farm here have large families; if not many children, they have work-hands, comers and goers, and there are few days when strangers do not sit down to their tables—agents, peddlers, etc. What a bonanza would honey be to the over-worked wife! It needs no cooking; she does not have to stand for hours, either, over a hot stove or by a fire out-of-doors, with smoke or ashes in her eyes, moving a stirrer back and forth all day, and at night till the clock strikes the "little hours," to finish it off as it boils and sputters. This class needs instructing in the use of honey, and they could be easily taught, if it were only brought to their notice.

We never shipped any honey more than once, and that was owing to the severe illness of Mr. Harrison; and if we had employed the young man who packed and shipped it, to have peddled it out, we should have saved money and worry, as he had been in the peddling business. During the winter, in most localities, there are plenty of young men out of employment, well fitted, with a little instruction, to sell honey. It would be better to trust them with our property than to ship it to entire strangers.

I am not ashamed of the business, but proud of it—glad that I am a producer of a pure sweet. In peddling honey, the better way when it is sold from house to house, would be to go forth as the apostles did, "by twos." One could drive the team, and abide by the stuff, while the other could exhibit the honey and solicit orders. The best assistant would be one who has been over the ground before. A honey-route, in time, would have a commercial value the same as milk-routes now have. A family that uses honey at all buys a good deal, while there are others who cannot be induced to use it; and in going over the ground the second time these could be left out.

Large producers must, of course, seek distant markets; but "it is the little foxes that spoil the vines." Small producers must sell their own honey at home, if they would succeed; make honey legal tender for everything they buy.

Peoria, Ills.

[About selling honey on commission, Mrs. Harrison is quite right in saying that it is vexatious and very unsatisfactory. A case in point oc-

curred in Chicago this month. A small lot of the best white clover honey ever produced was put into the hands of a commission merchant as a trial lot, to ascertain whether it would be advisable to let him have 50 tons more to sell. The commission merchant made returns at 5 cents per pound, less commissioner's expenses, etc. As it will not do to sell at such ruinous rates, the rest of the crop will be "held" from the commission men.—Ed.]

Local Convention Directory.

1887. Time and place of Meeting.

May 5.—Progressive, at Bedford, Ohio.

Miss Dema Bennett, Sec., Bedford, O.

May 10.—Keystone, at Scranton, Pa.

Arthur A. Davis, Sec., Clark's Green, Pa.

May 10.—Cortland Union, at Cortland, N. Y.

D. F. Shattuck, Sec., Homer, N. Y.

May 13.—Sheboygan County, at Hingham, Wis.

Mattie B. Thomas, Sec., Sheboygan Falls, Wis.

May 24.—N. W. Ills. & S. W. Wis., at Rockton, Ills.

D. A. Fuller, Sec., Cherry Valley, Ills.

May 26.—West Lake Shore Central, at Kiel, Wis.

Ferd Zastrow, Sec., Millhome, Wis.

Dec. —.—Michigan State, at East Saginaw, Mich.

H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—Ed.

SELECTIONS FROM OUR LETTER BOX

Expecting a Good Harvest.—Geo. W. Moore, Golden City, Mo., on April 22, 1887, says:

Bees have wintered finely. I had packed 10 colonies on the summer stands in the Langstroth hives; on Feb. 7, they had brood hatching; on March 10 they gathered pollen and honey from elm and maple. Fruit bloom is almost gone. It has been so windy that the bees have not had a chance to do much in the way of gathering honey. They are very strong in numbers. I look for a good honey harvest this year.

An Apiary Roughly Handled.—Jno. C. Peden, Lawrenceburg, Ky., on April 20, 1887, writes:

For 5 years I have had from 15 to 20 colonies of bees near the Kentucky river, between 2 and 3 miles from home. During that time they have been protected from harm by being near the house of Wm. Skelton, who had charge of the landing and elevator there; but last February he moved away, and that left my bees without protection, except in the daytime. On Tuesday, April 12, I made arrangements to remove them, but on that night some evil-disposed person turned them all (24 hives, 19 containing bees) down the river bank where

it sloped toward the river at an angle of 45°, was very rough and rocky. I heard of it early the next morning, and went to them, and by noon I had most of the bees back in the hives. Upon examination I find 13 queens left, which seems almost impossible, considering that many of the hives rolled for 50 to 75 feet down the bank. The surplus combs were stored in the upper stories of the hives, making nearly 500 combs in all. These, along with the bees, brood, combs, stores and hives were scattered in the utmost confusion, and that 13 queens were yet alive is much better than I expected.

Encouraging Outlook.—Ira Barber, De Kalb Junction, N. Y., on April 22, 1887, writes:

So far as I have learned, bees were put into winter quarters in poor condition, as a rule, in northern New York, and the result is a heavy loss to many bee-keepers. I carried the last of mine out to-day, and all occupy their old stands but 3 out of 147 colonies carried in last November. About 80 per cent. of them are in good condition for business. Clover has wintered fairly well, and the outlook for a crop of honey is favorable.

Long Winter Confinement of Bees.—G. M. Doolittle, Borodino, N. Y., on April 21, 1887, writes:

The first pollen was brought in by the bees to-day, and that in very small pellets from skunk-cabbage. The old snow-banks are still 3 feet deep in places in my bee-yard, with freezing nights nearly all the while, which does not tend to diminish them very fast. As near as I can get at it, the date of the first pollen was never so late as April 21 before in all my 18 years' experience with bees. Bees wintered out-doors had their first flight on April 3, which was just 5 months from the time they flew last fall. My loss is 10 per cent. of this class. Those in the cellar are quiet and nice yet, and I am glad of it, for it looks as if they are to be confined 6 months—180 days. Who beats that?

Sowing for Bee-Pasturage.—James Jardine, Ashland, Neb., on April 22, 1887, writes:

In this part of the State we have had rather a hard winter for bees that were out-of-doors. Many bee-keepers have lost almost all the bees they had. I put 101 colonies into a bee-cellar on Nov. 15, 1886, and took 101 colonies out on April 2, 1887. I kept the temperature at about 40° to 50° the most of the time. My hives are all 8-frame Langstroth; I gave them plenty of ventilation, and have been very successful so far with cellar-wintering. My bees are doing nicely now, and are breeding very fast. I hope we will have a better year for honey than last year. It was then too dry for them in this part of the State. I have induced many farmers here to sow Alsike clover this spring, and I think

if I had had plenty of the "Alsike Clover Leaflets" to show, I could have been still more successful; but the Leaflets were issued too late for me. I am trying the Chapman honey-plant this year; also the white mustard, which will be ready for the bees in June; and sweet clover. I mean to keep sowing bee-plants until my bees can have something else than the heart's-ease to get honey from. The basswood last year yielded honey pretty well for a few days, but when it came there was plenty of bees starving. Now I hope that the Alsike clover that has been sown this spring will furnish lots of honey in June next year. My apiary is out of town a little ways, and the bees were killed in the store windows, in June, by the thousands every day, and a good many store men were getting sick of their company. The only way "to keep peace in the family," is to do just as I have been doing this spring.

Breeding up Nicely.—B. W. Peck, Richmond Centre, O., on April 22, 1887, says:

My bees have again come through the long, cold winter, and are breeding up nicely. Bees in this locality generally have not wintered as well as they did last winter. My loss was 3 colonies out of 38.

Bees in Prime Condition, etc.—F. M. Taintor, Coleraine, Mass., on April 25, 1887, writes:

I am happy to say that our bees (those of Mr. W. W. Cary and mine, as we are in company) have wintered extremely well. We think we have some of the largest colonies we ever wintered. Every colony that was out in chaff hives are in prime condition. The spring is quite backward here, but we hope for warmer weather soon, as we have considerable transferring, and other important work to do. The valuable old AMERICAN BEE JOURNAL is worth more to me than all the rest, for the good common-sense which it contains.

Terrible Mortality among Bees—Late Snow Storms.—Geo. A. Wright, Glenwood, Pa., on April 20, 1887, writes:

It seems to be the impression that bees have wintered well all over the country, which I think can hardly be the case. In this locality, at least, the mortality among bees has been terrible, and for bee-keepers to report only the bright side, and leave the dark side untold, is to give the business a false coloring, which will surely operate against us. As far as I am concerned, I want the public to know how I have succeeded in wintering my bees. I began the winter with 106 colonies, 57 in chaff hives and 49 in Simplicity hives. Out of the 106 colonies 56 are dead, 6 are queenless, and more than 40 are weak. They all had plenty of stores, and were well packed with chaff; in fact, I put them up with greater care than

ever before; but, alas! I do not think that 20 per cent. of the bees in this locality can possibly survive. We have had a few warm days, and bees began to breed very fast; but day before yesterday we had one of the worst snow-storms of the season, and last night the mercury lowered to 10° above zero. So that I think the brood must surely have been chilled. Many small bee-keepers have lost all of their bees, and in every case where bees were not thoroughly packed, they are all dead. This has been the hardest winter on bees in this locality since the winter of 1880-81. The clover has not been injured by frost, as it has been protected by the snow; so what few bees are left will stand an excellent chance to get a good harvest. I want to hear from the dark as well as the bright side of bee-keeping.

Bloom Frozen.—Mr. Eugene Secor, Forest City, Iowa, on April 26, 1887, writes:

The weather is bad for unprotected bees outside. The fine weather of a couple weeks ago, which brought out the soft maples and all early blossoms, received a sudden setback last Saturday. One of the worst snow-storms of the season reached us. I finished taking bees out of the cellar on April 19. They came out in good condition generally, but I fear the effects of the late cold weather. If they were inside I should feel glad. I hear of heavy losses in some localities; and we are not "out of the woods" yet, since all the pollen and honey-bearing plants in bloom are frozen.

Unfavorable Weather for Bees.—F. A. Snell, Milledgeville, Ill., on April 26, 1887, writes:

The weather being very fine, and soft maples in bloom, I removed my bees from the cellar on April 7, in good condition. Every colony was alive and strong, and the combs were bright and free from mold. The hives and combs were as dry, apparently, as they would have been in the sitting-room or kitchen. I placed them in the cellar on Nov. 23, 1886. I have wintered my bees on natural stores for years, with excellent results; in fact just as good or better than on granulated sugar syrup, which I gave a good trial 15 years ago. The weather for the last two weeks has been very unfavorable for bees. It has frozen for the last few nights quite hard, ice forming as thick as window glass. I prefer a late opening of spring for bees.

Great Mortality of Queens.—O. B. Barrows, Marshalltown, Iowa, on April 22, 1887, writes:

On May 1, 1886, I had 54 colonies of bees—50 were strong and 4 were weak. I increased them by natural swarming to 98, gave away 2 colonies, and found 2 queenless in October. I put 94 into the cellar from Nov. 12 to Nov. 16, 1886, and a slow fire was kept

constantly burning in the cellar from Nov. 22 to April 1. The bees were put out from April 6 to April 8, and I found 2 queenless colonies and the bees all dead; since that I have found 9 more queenless, making 13 queenless colonies out of 96 colonies, since Oct. 1, 1886, and more than half of them were the old colonies having queens reared in 1886. The hives were all dry, with no moldy combs, and had plenty of honey. Was not this an unusual mortality among queens? If so, from the above data, wherein did I err? Two or three thicknesses of burlap over the brood-chamber was all the cover they had.

[I cannot account for your unusual loss of queens on grounds other than old age, or too high a temperature in your cellar, and the degree you did not state. When the temperature is kept too high, both workers and queens oftentimes leave the hive and never return.—JAMES HEDDON.]

Honey and Beeswax Market.

The following are our very latest quotations for honey and beeswax:

CHICAGO.

HONEY.—Sellers ask from 7 to 10 cts. for anything off in comb honey; this includes dark undesirable and crooked combs, and 2-pound sections. Good 1-lb. sections, 10@12c.; choice, 12@13c.—**BEESWAX.**—25c. R. A. BURNETT, Mar. 28. 161 South Water St.

DETROIT.

HONEY.—Best white comb, 11@12c. Market is improving. **BEESWAX.**—23c. M. H. HUNT, Bell Branch, Mich. Apr. 11.

SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 4@4½ cts. Comb, white, 7@13c. Market firm. **BEESWAX.**—Scarce at 19@22c. Apr. 4. SCHACHT & LEMCKE, 122-124 Davis St.

CLEVELAND.

HONEY.—Choice white in 1-lb. sections, 12@13c.; second quality, 10@11c.; and buckwheat unsalable at 8@9c. Extracted, 5@6c. **BEESWAX.**—25c. Apr. 20. A. C. KENDEL, 115 Ontario St.

ST. LOUIS.

HONEY.—Choice comb, 10@12c. Strained, in barrels, 3@4½c. Extra fancy, ¼ more than foregoing prices. Extracted, 4½@6c. Market dull. **BEESWAX.**—Firm at 21c. for prime. Apr. 21. D. G. TUTT & CO., Commercial St.

SAN FRANCISCO.

HONEY.—We quote: White comb, 12@14c.; amber, 7@9c. Extracted, white, 4½@5c.; light amber, 3½@4½c. Market quiet. **BEESWAX.**—19@22c. Apr. 16. O. B. SMITH & CO., 423 Front St.

BOSTON.

HONEY.—1-lb. packages of white clover honey at 13@15c.; 2-pounds at 11@13c. Extracted, 5@7c. Sales slow. **BEESWAX.**—26 cts. per lb. Apr. 22. BLAKE & RIPLEY, 57 Chatham Street.

CINCINNATI.

HONEY.—We quote for extracted, 3@7c. per lb. Best comb brings 11@14c. per lb. Demand fair. **BEESWAX.**—Good demand, 20@23c. per lb. for good to choice yellow. Apr. 21. C. F. MUTH & SON, Freeman & Central Av

MILWAUKEE.

HONEY.—We quote choice 1-lb. sections at 11@12c.; 2-lbs., 10@11c. No call for dark. White extracted, in barrels and kegs, 6@6½c.; in small packages, 6½@7c.; dark, in barrels and kegs, 4@5c.—Demand good. **BEESWAX.**—25c. Mar. 28. A. V. BISHOP, 142 W. Water St.



Issued every Wednesday by

THOMAS G. NEWMAN & SON,
PROPRIETORS.

923 & 925 WEST MADISON ST., CHICAGO, ILL.
At One Dollar a Year.

ALFRED H. NEWMAN,
BUSINESS MANAGER.

Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Money Orders can now be obtained at the Post Offices at reduced rates. Five dollars and under costs now only 5 cents. As these are absolutely safe, it will pay to get them instead of the Postal Notes which are payable to any one who presents them, and are in no way safe.

Preserve your Papers for reference. If you have no **BINDER** we will mail you one for 60 cents, or you can have one **FREE** if you will send us 3 new yearly subscriptions for the **BEE JOURNAL**.

Colored Posters for putting up over honey exhibits at Fairs are quite attractive, as well as useful. We have prepared some for the **BEE JOURNAL**, and will send two or more free of cost to any one who will use them, and try to get up a club.

We will Present Webster's Dictionary (pocket edition), and send it by mail, postpaid, for two subscribers with \$2. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

One Dollar invested for the weekly visits of the **AMERICAN BEE JOURNAL** for a year, will richly repay every apiarist in America.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have now gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

System and Success.

All who intend to be systematic in their work in the apiary, should get a copy of the **Apiary Register** and commence to use it. The prices are reduced, as follows:

For 50 colonies (120 pages).....\$1 00
" 100 colonies (220 pages).....1 25
" 200 colonies (420 pages).....1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable.

Leaflet No. 2, entitled "Alsike Clover for Pasture and Hay," is now ready for delivery. This should be scattered into every neighborhood, in order to induce farmers to plant Alsike, that the bees may have the advantage of it for pasture. We send them by mail 50 copies for 30 cents; 100 for 50 cents; 500 for \$2.25—all postpaid. It will pay bee-keepers to scatter these Leaflets, even if 9 out of 10 avail nothing. If ten farmers out of a hundred plant Alsike in any neighborhood, the bees will reap a very substantial reward.

The Convention History of America with a full report of the proceedings of the Detroit and Indianapolis conventions, and the **AMERICAN BEE JOURNAL** for one year, will be clubbed for \$1.25.

The Production of Comb Honey, as practiced and advised by W. Z. Hutchinson, can be obtained at this office, for 25 cts.

Sample Copies of the BEE JOURNAL will be sent **FREE** upon application. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office, or we will send them all to the agent.

As there is Another firm in Chicago by the name of "Newman & Son," we wish our correspondents would write "American Bee Journal" on the envelope when writing to this office. Several letters of ours have already gone to the other firm (a commission house), causing vexatious delay and trouble.

Do you Want a Farm Account Book? We have a few left, and make you a *very tempting offer*. It contains 166 pages, is printed on writing paper, ruled and bound, and the price is \$3. We will club it and the **Weekly BEE JOURNAL** for a year and give you both for \$2. If you want it sent by mail, add 20 cents for postage.

Simmins' Non-Swarming System is the title of a new English bee-book. The author claims that it will inaugurate a "new era in modern bee-keeping," and states that "it is based upon purely natural principles, and is the only system that can ever be relied upon, because no other condition exists in the economy of the hive that can be applied to bring about the desired result—a total absence of any desire to swarm." It contains 64 pages; is well printed and illustrated. Price 50 cents. It can now be obtained at this office.

OUR CLUBBING LIST.

We supply the **American Bee Journal** one year, and any of the following publications, at the prices quoted in the last column of figures. The first column gives the regular price of both. All postage prepaid.

	Price of both. Club
The American Bee Journal.....	1 00..
and Gleanings in Bee-Culture.....	2 00.. 1 75
Bee-Keepers' Magazine.....	1 25.. 1 25
Bee-Keepers' Guide.....	1 50.. 1 40
The Apiculturist.....	2 00.. 1 70
Canadian Bee Journal.....	2 00.. 1 75
Rays of Light.....	1 50.. 1 35
The 7 above-named papers.....	5 25.. 4 50
and Cock's Manual.....	2 25.. 2 00
Bees and Honey (Newman).....	2 00.. 1 75
Binder for Am. Bee Journal.....	1 60.. 1 50
Dzierzon's Bee-Book (cloth).....	3 00.. 2 00
Root's A B C of Bee-Culture.....	2 25.. 2 10
Farmer's Account Book.....	4 00.. 2 00
Guide and Hand-Book.....	1 50.. 1 30
Heddon's book, "Success,".....	1 50.. 1 40
A Year Among the Bees.....	1 75.. 1 50

One yearly subscription for the **AMERICAN BEE JOURNAL** must be ordered with each paper or book, in order to take advantage of the prices named in the last column.

E. Duncan Sniffen, Advertising Agent, 3 Park Row, New York, inserts advertisements in all first-class Newspapers and Magazines with more promptness and at lower prices than can be obtained elsewhere. He gives special attention to writing and setting up advertisements in the most attractive manner, and guarantees entire satisfaction. In all his dealings, he is honorable and prompt. Send for his Catalogue of first-class advertising mediums. Mailed free. 52A40t

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructible. When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

When Renewing your subscription please try to get your neighbor who keeps bees to join with you in taking the **BEE JOURNAL**. It is now so *cheap* that no one can afford to do without it. We will present a **Binder** for the **BEE JOURNAL** to any one sending us three subscriptions—with \$3.00—direct to this office. It will pay any one to devote a few hours, to get subscribers.

By Using the Binder made expressly for this **BEE JOURNAL**, all can have them bound and ready for examination every day in the year. We have reduced the price to 60 cents, postpaid. Subscription for one year and the binder for \$1.50.

Dr. Miller's Book, "A Year Among the Bees," and the **BEE JOURNAL** for one year, we will club for \$1.50.

Fire.—As I have just had the misfortune to-day of having my residence burned, including all my books, letters and correspondence, I wish to say that I will esteem it a favor if my customers will please send me at once their addresses, including a repetition of their orders. All orders will receive prompt attention. The loss of the house, including its contents, is \$4,000, and not one cent insurance! We could not save a thing out of the house, as the wind was blowing a gale.

J. P. H. BROWN.

Augusta, Ga., April 20, 1887.

Should any Subscriber receive this paper any longer than it is desired, or is willing to pay for it, please send us a postal card asking to have it stopped. Be sure to write your name and address plainly. Look AT YOUR WRAPPER LABEL.

A Cheap Smoker.—"Martinsville, Ohio, April 11, 1887.—Messrs. Bingham & Hetherington, Abconia, Mich.: Enclosed find \$2.50 for two Large 2½-inch Bingham Smokers (wide shield). They are for my neighbors. I have one of the Bingham Smokers that I have used six years, and it is as good as ever. Send ½-dozen rates.—Respectfully, AMOS R. GARNER." 17A4t

Advertisements.

FOR Sale or Trade.—65 Colonies of BEES, principally Italians, on nice, straight worker-comb, mostly in 2-story movable-comb hives. Price, \$275.00, really worth \$350.00. Call on, or immediately address, H. J. SCHROCK, Goshen, Ind.

The prices quoted last week were an error of the printer.—ED.

FOR CASH.—Pure Italian Queens in May and June: 1 Untested, \$1; ¼ doz., \$5.50; per dozen, \$10. For Tested Queens, double. Guarantee safe arrival.—Address, D. E. ALDERMAN, 18A4t Clinton, Sampson Co., N. C.

QUEENS for 75 cts.

I AM ready to ship choice Italian Queens, bred from select mothers. Untested, 75 cts.; Tested, \$1.50. E. F. LOCKETT, 18E4t COLUMBUS, MISS.

FRIENDS:—From many years' experience I find it to my interest, and to yours, to rear fine, well-developed QUEENS. I breed only Italians, and as I employ only experienced help to rear Queens, and making it a specialty this season, I will sell for cash till June 30, at \$4 per doz.; after June, special rates per doz. Will sell Nuclei & Bees per lb. cheap in June, as my honey-flow is over then. Mention this paper, and write your address very plainly. You shall have my prompt and cheerful attention. This will not appear again. IRA D. ALDERMAN, 18A4t Taylor's Bridge, Sampson Co., N. C.

PURE ITALIAN BEES, bred ten years from imported mothers, at \$5 per colony. Hybrids less. A. L. GOULD, Ridgeville, Ills. 16A3t

M. S. ROOP, MANUFACTURER OF APIARIAN SUPPLIES

And Dealer in BEES and HONEY. Send for my New Circular. Corner North 6th & Mill Streets, 12E4t COUNCIL BLUFFS, IOWA.

HOW TO WINTER BEES,

ELEVEN Essays by eleven prominent bee-keepers, sent to all who apply. Address, HENRY ALLEY, 11A4t Wenham, Mass.

Auction Sale.

WE will sell at PUBLIC AUCTION, at residence of late owner,

JONATHAN R. LINDLEY, GEORGETOWN, ILLS.,

under and by virtue of a chattel mortgage, about

75 COLONIES of BEES,

AND ABOUT

300 NEW HIVES,

MAY 7th, at 1 O'clock P. M.

18A4t

G. B. LEWIS & CO.

1880.

1887.

Notes from the Bright-Band Apiary.

I WILL send Pure Untested Italian QUEENS, reared from imported mothers, to any address, at 80 cents each; or Tested for \$1.25. Satisfaction guaranteed. Send for terms on large numbers.

18A4t

CHAS. KINGSLEY, BENTON, LA.

W. Z. HUTCHINSON,

Rogersville, Genesee Co., Mich.,

HAS written, published, and now offers for sale, a little book upon

"THE PRODUCTION OF COMB HONEY."

Although its distinctive feature is that of teaching how to profitably dispense with full sheets of foundation in the brood-nest when hiving swarms, several other points are touched upon, and the system of comb-honey production that the author believes to be best, is briefly outlined.

Price of the book, postpaid, 25 cents.

18A4t

100 COLONIES of Italian and Hybrid Bees for sale at bottom figures. Write for prices. A. J. & E. HATFIELD, SOUTH BEND, IND. 12E4t

ESSAYS

ON THE PRODUCTION OF COMB HONEY

WILL be given in the June issue of the AMERICAN APICULTURIST, by G. M. Doolittle, Dr. G. L. Tinker, Dr. C. C. Miller, and other prominent and well-known bee-keepers. Ready May 25. Price, 10 cts. Address, AMERICAN APICULTURIST, 18A4t WENHAM, MASS.

100 Colonies of Italian Bees, Strong, first-class in every respect, For Sale at reduced prices. 15A4t E. C. L. LARCH, Ashland, Mo.

500 Heddon-Langstroth HIVES

—FOR SALE.—

WITH slotted honey-board, eight brood-frames, crate filled with 28 sections, all put up in good shape and painted 2 coats.

In lots of five, \$1.00 each. (Price-list free on application.)

J. W. BITTENBENDER,

18A4t

KNOXVILLE, IOWA.

"Boss" One-Piece Sections,

MANUFACTURED BY

J. Forncrook & Co., Watertown, Wis.



Patented June 28, 1881.

WE will furnish you SECTIONS as cheap as the cheapest. Write for price-list. Watertown, Wis., May 1st, 1887.

Thos. G. Newman & Son, of Chicago, sell the one-piece Sections manufactured by us.

FOUNDATION

STAPLE brand, first quality, cannot be excelled. Satisfaction guaranteed. My Foundation is used and endorsed by Prof. J. H. Comstock, of Cornell University, G. W. Stanley, and many others. For Brood, 6 ft. to 10 ft., 40c. Light, 45c. Every sheet equal to sample; orders filled in rotation. 18E2t WILBER G. FISH, Ithaca, N. Y.

BOTTOM REACHED.

ITALIAN BEES in Heddon Hive ... \$4.00
QUEENS, Untested, 80 cts.; Tested ... 1.60
NUCLEI without Queens, per Frame ... 70
To Nucleus add price of Queen wanted.

Remit by P. O. Money Order, to

C. WEEKS,

15A4t

CLIFTON, TENN.

Extracted Honey For Sale.

We have a large quantity of CHOICE WHITE EXTRACTED HONEY, in kegs holding from 200 lbs. to 225 lbs. each, which we will deliver on board the cars at 7 cents per lb. Orders solicited.

THOS. G. NEWMAN & SON,

923 & 925 West Madison St., CHICAGO, ILL.

Patent Flat-Bottom Comb Foundation



High Side Walls, 4 to 14 square feet to the pound. Wholesale and Retail. Circulars and Samples free

J. VAN DEUSEN & SONS,

(SOLE MANUFACTURERS),

1A4t SPROUT BROOK, Mont. Co., N. Y.

THE BRITISH BEE JOURNAL

AND BEE-KEEPER'S ADVISER.

The BRITISH BEE JOURNAL is published every Week, at Ten Shillings and 10d. per annum, and contains the best practical information for the time being, showing what to do, and when and how to do it. It is edited by T. W. Cowan, Esq.

The British Bee Journal and the AMERICAN BEE JOURNAL, one year, for \$3.00.

BEES for SALE, Cheap.

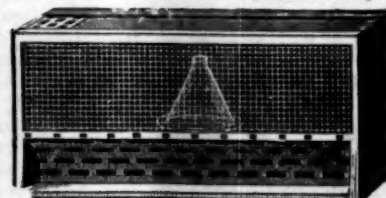
100 Colonies of American-reared Italian Bees, best strain, strong, and in 10-frame wired Simplicity hives; for sale at \$8.00 per Colony. Z. A. CLARK, 8E4t ARKADAPHA, ARK.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

FOR SALE.

70 COLONIES of Italian and Hybrid BEES—10 Colonies in 10 L. frame hives, balance on 8 American frames in Simplicity-made hives. Will sell all for \$4.00 per Colony. J. B. KEELER, 17A2t CARLINVILLE, ILLS.

Alley's Drone and Queen Trap.



Price, by Express, 50 cts.; by mail, 65 cts.; 12 in the flat, and one nailed (18 in all), \$3.50; 50, in the flat, \$12.00. Address.

THOS. G. NEWMAN & SON,

923 & 925 West Madison St., CHICAGO, ILL.

Extra Thin FOUNDATION

In 25-Pound Boxes.

WE CAN now furnish VAN DEUSEN'S Extra-Thin Flat-Bottom Foundation put up in 25-lb. Boxes, in sheets 16½x28 inches, at \$12.50 per box.

All orders for any other quantity than exactly 25 lbs. (or its multiple) will be filled at the regular price—60 cents per lb.

This Foundation runs 12 feet to the lb.—

The above is a special offer, and is a Bargain to all who can use that quantity.

THOS. G. NEWMAN & SON.,
923 & 925 W. Madison St., CHICAGO, ILL.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

BARNES' FOOT-POWER MACHINERY.



Read what J. I. PARENT, of CHARLTON, N.Y., says:—"We cut with one of your Combined Machines, last winter, 50 chaff hives with 7-in. cap, 100 honey-racks, 500 broad frames, 2,000 honey-boxes and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make and we expect to do it with this Saw. It will do all you say it will." Catalogue and Price-List

Free. Address, W. F. & JOHN BARNES,
45Ct No. 464 Ruby St., Rockford, Ill.

BEES

AND QUEENS A Specialty.—
Untested QUEENS, in May, \$1.00.
After June 1st, 75 cts. Price-List of Full Colonies, two and 3 frame Nuclei, Hives, Foundation, &c., Free.

15A76 JOHN NEBEL & SON, High Hill, Mo.

Vandervort Foundation Mill.

6 Inch, Price, \$20.00.

It makes the finest extra thin Foundation for comb honey. For Sale by

THOS. G. NEWMAN & SON,
923 & 925 West Madison Street, CHICAGO, ILL.

1887. ITALIAN QUEENS. 1887.

6 WARRANTED QUEENS FOR \$5.
If you want Nice, Bright Queens, the progeny of which are good workers, and could be seen working on Red Clover at any time within the last two years, send for my Circular.

J. T. WILSON,
NICHOLASVILLE, KY.

A Year among the Bees,

BEING

A Talk about some of the Implements, Plans and Practices of a Bee-keeper of 25 years' Experience, who has for 8 years made the Production of Honey his Exclusive Business.

BY DR. C. C. MILLER.

Price, 75 cents, by mail. This is a new work of about 114 pages, well-printed and nicely bound in cloth. Address,

THOS. G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILL.

Western BEE-KEEPERS' Supply House.



We manufacture Bee-Keepers' supplies of all kinds, best quality at lowest prices. Hives, Sections, Comb Foundation, Extractors, Smokers, Crates, Honey Buckets, Vials, Feeders, Bee-Literature, etc., etc. Imported Italian Queens, Italian Queens, Bees by the lb., Nuclei or Colony. "Bee-Keepers' Guide, Memoranda and Illustrated Catalogue" of 48 pages FREE to Bee-Keepers. Address JOSEPH NYSEWANDER, DES MOINES, IOWA.

Shuck's Invertible Hives & Cases. I make L. hives of all styles. Greatly reduced prices. 806 Walnut st. 18E3t

BEES and HONEY,

OR THE

Management of an Apiary for Pleasure and Profit; by

THOMAS G. NEWMAN,
Editor of the American Bee Journal.

It contains 230 profusely illustrated pages is "fully up with the times" in all the improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the honey-bee, and at the same time produce the most honey in its best and most attractive condition. Bound in cloth, \$1.00, postpaid.

A Liberal Discount to Dealers, by the Dozen or Hundred.

THOS. G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILL.

The AMERICAN BEE JOURNAL for a year and the book, "Bees and Honey," will be sent for \$1.75.

SECTIONS.

WE make a specialty of the manufacture of DOVE-TAILED SECTIONS of the White Poplar, the whitest and best wood for the purpose. We make all styles and sizes, but recommend the Side-Opening Sections as superior to any other. The great accuracy and fine finish of our Sections are the admiration of everybody. Sample 3 cents Price-List of Supplies free.

Address, DR. G. L. TINKER,
8Etf NEW PHILADELPHIA, O.

My 19th Annual Price-List of Italian, Cyprian & Holy-Land Bees, Queens and Nuclei Colonies (a specialty): Also Supplies—will be sent to all who send their names and addresses. H. H. BROWN,
12-15-18 St LIGHT STREET, Columbia Co., PA.

Chapman Honey-Plant Seed

(*Echinops sphærocephalus*.)

We can supply this seed POST-PAID at the following prices: One-half ounce, 50 cents; 1 ounce, \$1; 2 ounces, \$1.50; 4 ounces, \$2; ½ pound, \$3; 1 pound, \$5. One pound of seed is sufficient for half an acre, if properly thinned out and re-set.

THOS. G. NEWMAN & SON,
923 & 925 West Madison St., CHICAGO, ILL.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

DON'T BUY QUEENS, HIVES, SECTIONS or SUPPLIES

before you send for my Catalogue and Price-List. Address,

J. P. H. BROWN,
8Etf AUGUSTA, GEORGIA.

DRAKE & SMITH,

Successors to A. E. Manum, Bristol, Vt.

MANUFACTURERS of the BRISTOL Bee-Hive, the Standard Hive of Vermont.

SECTION HONEY BOXES,

made from white poplar, (the best timber in the world for honey-boxes), Clamps, and a Wood Thumb-Screw for Clamps. Separators and Wood Sides. LIGHTNING GLUERS Shipping-Crates, Bee-Escapes, Bee-Feeders, and

MANUM'S BEE-SMOKERS,

all made of the best material and in a workmanlike manner. Send stamp for Sample SECTION and Price-List. 2E12t

"Boss" One-Piece Sections,

MANUFACTURED BY

J. Fornerook & Co., Watertown, Wis.



Patented June 28, 1881.

WE will furnish you SECTIONS as cheap as the cheapest. Write for price-list. Watertown, Wis., May 1st, 1887.

ARMSTRONG'S New Reversible Hive.

The cheapest, simplest and most practical Hive ever offered to the public.

H. D. Cutting, of Clinton, Mich., says:—"Let me congratulate you on having such a good hive; your 'reversible' section-case is perfection itself."

Sample Hive, complete and painted, \$2.50.

Send your name and post-office address, plainly written on a postal card, and receive our 32-page Illustrated Catalogue, free.

Address, E. S. ARMSTRONG,
9Atf JERSEYVILLE, ILLS.

WRITE

TO SMITH & GOODELL, Rock Falls, Ills., for low prices on Apiarian Supplies. 16A4t

EXCELSIOR HONEY EXTRACTORS



In answer to frequent inquiries for Extractors carrying 3 and 4 Langstroth frames, we have concluded to adopt these two new sizes. The 3 frame basket is in a can of the same size and style as the 2 frame. The 4 frame basket is in the larger can, with the cone or metal standard for the basket to revolve upon, leaving room underneath the basket for 75 or 80 lbs. of honey. It will be complete, with covers, and in every way identical, except in size, with the \$16.00 Extractor, 13x20, which is intended for any size of frame.

Excepting with the \$8.00 Extractors, all the different styles have sliders over the can leading to the honey gate, and movable sides in the Comb Baskets. The \$8.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x18 inches.....	\$8 00
For 2 Langstroth " 10x18 "	8 00
For 3 " 10x18 "	10 00
For 4 " 10x18 "	14 00
For 2 frames of any size, 13x20 "	12 00
For 3 " 13x20 "	12 00
For 4 " 13x20 "	16 00

THOS. G. NEWMAN & SON,
923 & 925 West Madison Street, CHICAGO, ILL.

BEAUTIFUL.

ALL-IN-ONE-PIECE Sections, smooth inside and out. Comb Foundation, Alsike Clover Seed, and everything needed in the apiary.

Send for free price list, and samples of Sections and Foundation.

M. H. HUNT,
BELL BRANCH, Wayne Co., MICH.
10Etf Near Detroit.

Thirty Years a Queen-Rearer.

LONGER in the Business than any other man living. Send for Price-List.

HENRY ALLEY,
14A1f WENHAM, Essex Co., MASS.

BEST ROOFING

Any one can apply it. Catalogue & samples Free. ESTAB. 1866. W. H. FAY & CO. Camden, N.J. Also St. Louis. MINNEAPOLIS. OMAHA. 15A8t